

Early stages of yaws in a 2-year-old African girl

G. ELSTE

Dermatological Clinic and Centre for Control of Venereal Diseases, East Berlin, East Germany

Yaws, one of the tropical non-venereal treponematoses, is commonly to be found in the West Indies, Central Africa, and South America. Tourism and other movements of people, such as students, from those countries increase the possibility of finding yaws in European countries.

Case report

A 2-year-old African girl was diagnosed as a case of early yaws at the Dermatological Department, East Berlin. One week before leaving Africa, during the rainy season in the middle of October, this child developed a small painless ulcer on the right knee which enlarged to a diameter of 2 to 4 cm. in the following 2 weeks. After a further 2 weeks, dry itchy lesions erupted on the gluteal regions and on the helix of the right ear.

On November 23, 1974, the first clinical examination showed a deep ulcer on the right knee, 4 cm. in diameter. Its surface was covered by a friable grey-green exudate (Fig. 1). This was the primary lesion of yaws. The right regional lymph glands were enlarged but painless. On the

right gluteal region, a confluent papilloma could be seen, the surface of which was partly eroded and partly covered by a scab (Fig. 2). Similar focal lesions were seen in the area of the helix of the right ear (Fig. 3). These were typical

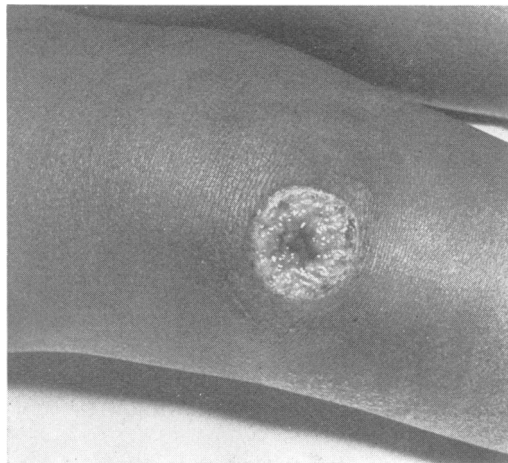


FIG. 1 *Ulcer on the right knee*

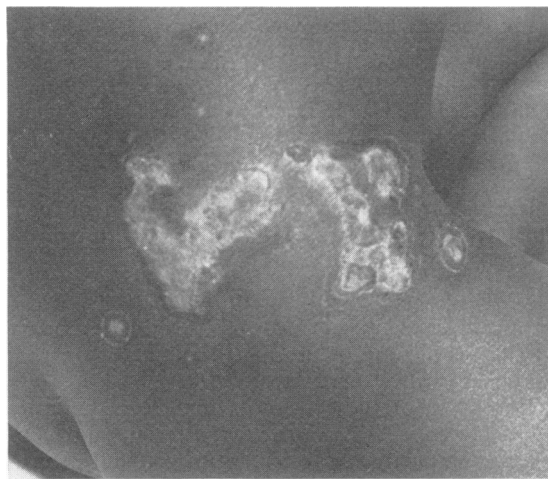


FIG. 2 *Papilloma in right gluteal region*



FIG. 3 *Focal lesions on right ear*

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Address for reprints: Dr. G. Elste, Hautklinik, 1115 Berlin Buch, East Germany

lesions of the secondary stage. Radiographs of the bones did not reveal any evidence of periostitis. Laboratory investigations, including cultures for bacteria and fungi from the ulcer and papillomas, were negative. Dark-field examination of material from the primary lesion on the right knee, taken after removing the crust, showed *Treponema pertenue* in large numbers and with good mobility. The secondary lesion of the helix of the ear healed after treatment with 0.6 m.u. aqueous penicillin (comprising 1 part sodium penicillin to 3 parts procaine penicillin) a day for 10 days, and the secondary papillomas of the gluteal region healed after 18 days; the primary ulcer had healed completely after 23 days. In addition, the local lymph glands had returned to their normal size when the patient was discharged on the 25th day.

The course of the serological tests (Table) confirmed our opinion concerning the early stage of yaws.

The Table also illustrates the importance of the absorbed fluorescent treponemal antibody (FTA-ABS) test, which becomes positive early in treponemal diseases and when used quantitatively can

reflect response to treatment. On only one occasion was any of the other tests reactive; this was the cardiolipin complement-fixation test which was positive before treatment.

TABLE *Results of serological tests*

<i>Serological tests</i>	<i>FTA-ABS</i>	<i>Treponemal immobilization</i>	<i>Cardiolipin complement-fixation</i>	<i>VDRL</i>
Before treatment	1:5 Positive 1:100 Negative	Negative	Positive	Negative
Time after treatment (days)				
8	1:5 Positive 1:100 Positive	Negative	Negative	Negative
15	1:5 Positive 1:40 Negative 1:100 Negative	Negative	Negative	Negative
23	1:5 Weak positive 1:40 Negative	Negative	Negative	Negative
30	Negative	Negative	Negative	Negative